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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/801,999

03/15/2004

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MS1-1957US

3338

22801 7590 01/18/2008
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EXAMINER

ZHANG, SHIRLEY X

ART UNIT

PAPER NUMBER

4121

MAIL DATE

DELIVERY MODE

01/18/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/801,999	Applicant(s) BOX ET AL.	
	Examiner SHIRLEY X. ZHANG	Art Unit 4121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>November 17, 2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This non-final office action is responsive to the U.S. patent application no. 10/801,999 filed on March 15, 2005.

Claims 1-37 have been examined and are pending.

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on November 17, 2006 was filed after the mailing date of the original application on March 15, 2004. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-3, 5-13, 15-23, 25-33 and 35** are rejected under 35 U.S.C. 102(b) as being anticipated by the published document “Web Services Addressing (WS-Addressing) authored by Bosworth et al., hereinafter “Bosworth”.

Regarding claims 1, 11, 21 and 31, Bosworth teaches a method for, a computer readable medium comprising instructions for, a computer device for and a computing device comprising means for open content model Web service messaging in a networked computing environment, the method comprising:

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generating a transport neutral message (page 2, “Abstract” discloses that WS-addressing enables message transmission in a transport-neutral manner) comprising message recipient (page 8, section 3. “Message information header” discloses the property [recipient]), endpoint addressing information (page 8, section 3 discloses the property [destination]), and one or more reference properties (page 8-9, section 3 discloses other reference properties such as [source endpoint] and [reply endpoint]) comprising selectively opaque message context (page 8, section 3. discloses “message information header”, which is a message context”);

binding the transport neutral message to a transport protocol for communication to the message recipient (page 7, section 2.3 “Binding Endpoint References” discloses binding the message to a transport protocol such as SOAP or WSDL); and wherein at least a portion of the selectively opaque message context is not directed to the message recipient (page 12, section 4 “Security Considerations” discloses that the message information headers blocks MAY have their contents encrypted in order to obtain end-to-end privacy, but care should be taken to ensure that intermediary processors have access to required information (e.g. <wsa:To>); it is inherent in the above disclosure that the message information header is opaque to the intermediaries that does not need access to the information in the header).

Further regarding claim 21, it is inherent in Bosworth that the web services are realized using a computing device that comprises a processor and a memory coupled to the processor, as the Web is a network of computing devices.

Regarding claims 2, 12, 22 and 32, Bosworth teaches the method, the computer readable medium comprising instructions, the computer device and the computing device comprising means, as recited in claims 1, 11, 21 and 31 respectively.

Bosworth further teaches that the selectively opaque context directs an endpoint to send one or more responses to a message source, the message source not being the message recipient (page 8-9, section 3 discloses that the message information header may have the property [source endpoint], which is not the same as [recipient]).

Regarding claims 3, 13, 23 and 33, Bosworth teaches the method, the computer readable medium comprising instructions, the computer device and the computing device comprising means, as recited in claims 1, 11, 21 and 31 respectively.

Bosworth further teaches that a portion of the selectively opaque context directs the message recipient as to how to handle one or more messages sent to the endpoint in a session (page 11, section 3.1 discloses that the element “/wsa:Recipient” conveys the entire endpoint reference of the recipient and senders may elect to add this header as a processing hint to downstream nodes).

Regarding claims 5, 15, and 25, Bosworth teaches the method, the computer readable medium comprising instructions, the computer device and the computing device comprising means, as recited in claims 1, 11, and 21 respectively.

Bosworth further teaches that the selectively opaque message context is based on an Extended Markup Language (XML) messaging protocol (page 7-8, section 2.3 discloses a sample message in the XML format).

Regarding claims 6, 16, and 26, Bosworth teaches the method, the computer readable medium comprising instructions, the computer device and the computing device comprising means, as recited in claims 1, 11, and 21 respectively.

Bosworth further teaches that in binding, the transport protocol is based on Simple Object Access Protocol (SOAP) (page 7, section 2.3 discloses using SOAP binding for endpoint references).

Regarding claims 7, 17, and 27, Bosworth teaches the method, the computer readable medium comprising instructions, the computer device and the computing device comprising means, as recited in claims 1, 11, and 21 respectively.

Bosworth further teaches that the addressing information and selectively opaque message context are respectfully specified by an endpoint reference (page 4, section 2 "Endpoint References") and message information headers (page 8, section 3 "Message Information Header").

Regarding claims 8, 18, and 28, Bosworth teaches the method, the computer readable medium comprising instructions, the computer device and the computing device comprising means, as recited in claims 1, 11, and 21 respectively.

Bosworth further teaches that the endpoint reference is self-contained service endpoint description (page 5, section 2.1 discloses a self-contained set of properties an endpoint reference consists of).

Regarding claims 9, 19, and 29, Bosworth teaches the method, the computer readable medium comprising instructions, the computer device and the computing device comprising means, as recited in claims 1, 11, and 21 respectively.

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Bosworth further teaches that the endpoint reference and/or message information headers provide identification and description of specific service instances and/or specific instance details (page 6, section 2.2 discloses that an endpoint reference contains information such as `"/wsa:EndpointReference/wsa:PortType"`, `"/wsa:EndpointReference/wsa:ServiceName"`, and `"/wsa:EndpointReference/wsa:ServiceName/@PortName"` that identify and describe the service instances and/or specific instance details).

Regarding claims 10, 20, and 30, Bosworth teaches the method, the computer readable medium comprising instructions, the computer device and the computing device comprising means, as recited in claims 1, 11, and 21 respectively.

Bosworth further teaches that the message information headers further comprise a reply to property identifying an intended recipient for a reply to the transport neutral message (page 8, section 3 discloses the element [reply endpoint] in a message information header), a relates to property that indicates how the transport neutral message relates to a different transport neutral message (page 9, section 3 discloses the element [relationship] in a message information header).

Regarding claim 35, Bosworth teaches a computer-readable medium comprising an open content model data structure thereon, the open content model data structure comprising:

a message recipient data field (page 8, section 3, "Message information header" discloses the property [recipient]);

an endpoint addressing data field (page 8, section 3 discloses the property [destination]); and

one or more reference properties data fields comprising selectively opaque message context (page 8-9, section 3 discloses other reference properties such as [source endpoint] and [reply endpoint]) comprising selectively opaque message context (page 8, section 3. discloses “message information header”, which is a message context”), at least a portion of the selectively opaque message context is not directed to the message recipient (page 12, section 4 discloses that a message may contain multiple message information header blocks, where it is inherent that these blocks can be directed to targets that are not the message recipient).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were

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made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. **Claims 4, 14, 24, 34, 36 and 37** are rejected under 35 U.S.C. 103(a) as being unpatentable over Bosworth as applied to claims 1, 11, 21 and 31 above, and further in view of the published document “Web Services Coordination (WS-Coordination) authored by Cabrera et al., hereinafter “**Cabrera**”.

Regarding claims 4, 14, 24 and 34, Bosworth teaches the method, the computer readable medium comprising instructions, the computer device and the computing device comprising means, as recited in claims 1, 11, and 21 respectively.

Bosworth does not disclose but Cabrera discloses that wherein the message recipient is a service coordinator (Cabrera, page 4, Fig.1 and page 7, Fig. 2 disclose web service architectures where coordinators are introduced to coordinate activities; page 6, section 2 disclose an example of “Coordination Context” that is used to pass coordination information to parties involved in a coordination service).

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine Bosworth with Cabrera so that the message recipient is a service coordinator. The fact that Cabrera utilizes web services addressing in an extensible framework for coordinating activities (page 11, lines 1-2) is itself an example of combining Bosworth with Cabrera, therefore would have motivated one of ordinary skill to do the same.

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Regarding claim 36, the combination of Bosworth and Cabrera teaches the computing device as recited in claim 34.

Bosworth further teaches that the selectively opaque context directs an endpoint to send one or more responses to a message source, the message source not being the message recipient (page 8-9, section 3 discloses that the message information header may have the property [source endpoint], which is not the same as [recipient]).

Regarding claim 37, the combination of Bosworth and Cabrera teaches the computing device as recited in claim 34.

Bosworth further teaches that a portion of the selectively opaque context directs the message recipient as to how to handle one or more messages sent to the endpoint in a session (page 11, section 3.1 discloses that the element “/wsa:Recipient” conveys the entire endpoint reference of the recipient and senders may elect to add this header as a processing hint to downstream nodes).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 7254579 B2 Cabrera; Luis Felipe et al. Using endpoint references in a pub-sub system;

US 20050204051 A1 Box, Donald F. et al. Open content model Web service messaging;

US 20050182843 A1 Reistad, Brian J. et al. Computer system instrumentation information;

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US 20070204279 A1 Warshavsky; Alexander S. et al. METHOD AND
SYSTEM FOR OUTBOUND WEB SERVICES;

US 6980993 B2 Horvitz; Eric J. et al. Schemas for a notification platform
and related information services;

US 7117504 B2 Smith; Adam W. et al. Application program interface that
enables communication for a network software platform;

US 7200675 B2 Wang; Yi-Min et al. Summary-based routing for content-
based event distribution networks;

US 7302634 B2 Lucovsky; Mark H. et al. Schema-based services for
identity-based data access;

US 7017162 B2 Smith; Adam W. et al. Application program interface for
network software platform;

US 7047243 B2 Cabrera; Luis Felipe et al. Coordinating transactional
web services;

Non-Patent Publications

Donald Ferguson, Tony Storey, Brad Lovering, John Shewchuk, "Secure,
Reliable, Transacted Web Services: Architecture and Composition", September 2003.

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to SHIRLEY X. ZHANG whose telephone number is
(571)270-5012. The examiner can normally be reached on Monday through Friday
7:30am - 5:00pm EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Taghi Arani can be reached on (571) 272-3787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. X. Z./

/Taghi T. Arani/
Supervisory Patent Examiner, Art Unit 4121
1/17/2007